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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,033	07/03/2001	Mark Henry Pausch	011420102	5078

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Garrett & Dunner
1300 I Street NW
Washington, DC 20005

EXAMINER

JIANG, DONG

ART UNIT	PAPER NUMBER
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1646

DATE MAILED: 10/01/2002

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/786,033

Applicant(s)

PAUSCH ET AL.

Examiner

Dong Jiang

Art Unit

1646

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-37 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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DETAILED ACTION

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1, 2, 4-7, 9, 13, 14, 16-28, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified muscarinic acetylcholine receptor, wherein the modification promotes agonist stimulated growth.

Group II, claim(s) 1, 3 in part, 4-7, 9, 13, 14, 16-27, 29 in part, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified muscarinic acetylcholine receptor, wherein the modification results in improved coupling between the receptor and a G protein.

Group III, claim(s) 1, 3 in part, 4-7, 9, 13, 14, 16-27, 29 in part, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified muscarinic acetylcholine receptor, wherein the modification results in failure of the receptor to interact with desensitization machinery.

Group IV, claim(s) 1, 2, 4-7, 10, 13-28, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified cholecystokinin CCKB receptor, wherein the modification promotes agonist stimulated growth.

Group V, claim(s) 1, 3 in part, 4-7, 10, 13-27, 29 in part, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified cholecystokinin CCKB receptor, wherein the modification results in improved coupling between the receptor and a G protein.

Group VI, claim(s) 1, 3 in part, 4-7, 10, 13-27, 29 in part, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified cholecystokinin CCKB receptor, wherein the modification results in failure of the receptor to interact with desensitization machinery.

Group VII, claim(s) 1, 2, 4-6, 11, 13, 14, 16-28, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified somatostatin receptor, wherein the modification promotes agonist stimulated growth.

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Group VIII, claim(s) 1, 3 in part, 4-6, 11, 13, 14, 16-27, 29 in part, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified somatostatin receptor, wherein the modification results in improved coupling between the receptor and a G protein.

Group IX, claim(s) 1, 3 in part, 4-6, 11, 13, 14, 16-27, 29 in part, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified somatostatin receptor, wherein the modification results in failure of the receptor to interact with desensitization machinery.

Group X, claim(s) 1, 2, 4-7, 12-14, 16-28, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified Alpha 2a adrenergic receptor, wherein the modification promotes agonist stimulated growth.

Group XI, claim(s) 1, 3 in part, 4-7, 12-14, 16-27, 29 in part, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified Alpha 2a adrenergic receptor, wherein the modification results in improved coupling between the receptor and a G protein.

Group XII, claim(s) 1, 3 in part, 4-7, 12-14, 16-27, 29 in part, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified Alpha 2a adrenergic receptor, wherein the modification results in failure of the receptor to interact with desensitization machinery.

Group XIII, claim(s) 1, 2, 4-6, 8, 13, 14, 16-28, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified serotonin receptor, wherein the modification promotes agonist stimulated growth.

Group XIV, claim(s) 1, 3 in part, 4-6, 8, 13, 14, 16-27, 29 in part, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified serotonin receptor, wherein the modification results in improved coupling between the receptor and a G protein.

Group XV, claim(s) 1, 3 in part, 4-6, 8, 13, 14, 16-27, 29 in part, 30-34, and 37 drawn to an isolated nucleic acid sequence encoding a modified serotonin receptor, wherein the modification results in failure of the receptor to interact with desensitization machinery.

Group XVI, claim(s) 27, 28, and 30-37 drawn to an isolated nucleic acid sequence encoding a modified neurotensin receptor, wherein the modification promotes agonist stimulated growth.

Group XVII, claim(s) 27, 29 in part, and 30-37 drawn to an isolated nucleic acid sequence encoding a modified neurotensin receptor, wherein the modification results in improved coupling between the receptor and a G protein.

Group XVIII, claim(s) 27, 29 in part, and 30-37 drawn to an isolated nucleic acid sequence encoding a modified neurotensin receptor, wherein the modification results in failure of the receptor to interact with desensitization machinery.

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Note: claim 19 is interpreted as it depends from claim 18, as there is no vector in claim 10, from which claim 19 is currently dependent from. Applicants are required to clarify this matter in response to the present Office Action.

The inventions listed as Groups I-XVIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Pursuant to 37 C.F.R., the main invention in the instant application comprises the first-recited product, a modified muscarinic acetylcholine receptor with an improved functional response in promoting agonist stimulated growth. The additional products of Groups II-XVIII inventions do not relate to a single inventive concept under PCT Rule 13.1 because they are directed to different chemical and structural entities (different GPCRs), and/or have distinct functional responses. As such, they do not share the same technical feature within the meaning of PCT Rule 13.2, and thus, do not relate to a single invention concept within the meaning of PCT Rule 13.1.

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

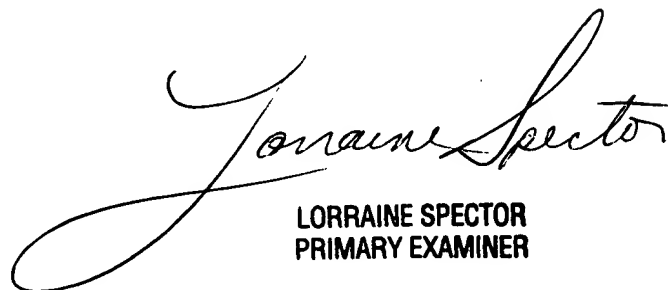
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Advisory Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dong Jiang whose telephone number is 703-305-1345. The examiner can normally be reached on 9:30 am - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yvonne Eyler can be reached on 703-308-6465. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-0294 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.


LORRAINE SPECTOR
PRIMARY EXAMINER

Dong Jiang, Ph.D.
September 27, 2002